

LISTING OF CLAIMS:

1 – 11 (canceled).

12. (currently amended) An isolated and purified nucleic acid molecule comprising a nucleotide sequence encoding a persephin polypeptide wherein the persephin polypeptide

(a) comprises an amino acid sequence which contains amino acids at positions indicated in parentheses: Cys(1), Leu(3), Val(10), Leu(13), Gly(14) Leu(15), Gly(16), Tyr(17), Glu(21), Phe(25), Arg(26), Tyr(27), Cys(28), Gly(30), Cys(32), Leu(44), Leu(47), Cys(58), Cys(59), Pro(61), Asp(66), Phe(69), Leu(70), Asp(71), Ser(83), Ala(84) Cys(87), and Cys(89), said positions being identified by alignment with SEQ ID NO:223,

(b) has at least 75% sequence identity with SEQ ID NO:223, and

(c) promotes survival of mesencephalic neuronal cells,

wherein the nucleotide sequence comprises SEQ ID NO:199 or SEQ ID NO:201.

13 – 27 (canceled).

28. (previously presented) An isolated and purified nucleic acid molecule comprising a nucleotide sequence encoding a persephin polypeptide, wherein the persephin polypeptide comprises SEQ ID NO:223, and wherein the persephin polypeptide promotes survival of mesencephalic neuronal cells.

29. (previously presented) An isolated and purified nucleic acid molecule comprising a nucleotide sequence encoding a persephin polypeptide, wherein the persephin polypeptide consists of SEQ ID NO:221, and wherein the persephin polypeptide promotes survival of mesencephalic neuronal cells.

30 – 41 (canceled).

42. (previously presented) An isolated nucleic acid molecule comprising a nucleotide sequence fully complementary to the nucleotide sequence of claim 12.

43 – 45 (canceled).